

Docket No. AUS920010385US1

CLAIMS:

What is claimed is:

1. A method in a logically partitioned data processing
5 system including an operating system debugger and
partition management firmware, said method comprising the
steps of:

establishing extensions within said operating system
debugger; and

10 utilizing said extensions to debug said partition
management firmware.

2. The method according to claim 1, further comprising
the step of establishing function calls within said
15 operating system debugger that when invoked by said
operating system debugger cause said partition management
firmware to execute partition management firmware
operations.

20 3. The method according to claim 2, further comprising
the steps of:

establishing an event handler routine within said
operating system debugger;

25 invoking said event handler routine by said
operating system debugger; and

reporting, from said partition management firmware
to said operating system debugger, partition management
firmware events in response to said operating system
debugger invoking said event handler routine.

30

4. The method according to claim 2, further comprising
the steps of:

Docket No. AUS920010385US1

establishing a read memory call within said
operating system debugger;

invoking said read memory function call by said
operating system debugger; and

5 reading data from a physical memory location
utilizing said partition management firmware in response
said operating system debugger invoking said read memory
function call.

10 5. The method according to claim 2, further comprising
the steps of:

establishing a write memory call within said
operating system debugger;

15 invoking said write memory function call by said
operating system debugger; and

writing data to a physical memory location utilizing
said partition management firmware in response said
operating system debugger invoking said write memory
function call.

20

6. The method according to claim 1, further comprising
the steps of:

determining whether debugging is enabled within said
partition management firmware;

25 permitting said operating system debugger to utilize
said extensions to debug said partition management
firmware in response to a determination that debugging is
enabled within said partition management firmware; and

30 prohibiting said operating system debugger to
utilize said extensions to debug said partition

Docket No. AUS920010385US1

management firmware in response to a determination that debugging is disabled within said partition management firmware.

5 7. The method according to claim 6, further comprising the steps of:

 including a service processor within said data processing system;

 enabling debugging within said partition management
10 firmware utilizing said service processor; and
 disabling debugging within said partition management firmware utilizing said service processor.

 8. The method according to claim 1, wherein said data
15 processing system includes hardware, wherein said operating system debugger exists within a partition, and further wherein said partition management firmware exists between said partition said hardware.

20 9. A computer program product in a logically partitioned data processing system including an operating system debugger and a partition management firmware, comprising:

 instruction means for establishing extensions within
25 said operating system debugger; and

 instruction means for utilizing said extensions to debug said partition management firmware.

 10. The product according to claim 9, further comprising
30 instruction means for establishing function calls within said operating system debugger that when invoked by said

Docket No. AUS920010385US1

operating system debugger cause said partition management firmware to execute partition management firmware operations.

- 5 11. The product according to claim 10, further comprising:

instruction means for establishing an event handler routine within said operating system debugger;

- 10 instruction means for invoking said event handler routine by said operating system debugger; and

- 15 instruction means for reporting, from said partition management firmware to said operating system debugger, partition management firmware events in response to said operating system debugger invoking said event handler routine.

12. The product according to claim 10, further comprising:

- 20 instruction means for establishing a read memory call within said operating system debugger;

instruction means for invoking said read memory function call by said operating system debugger; and

- 25 instruction means for reading data from a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said read memory function call.

13. The product according to claim 10, further comprising:

- 30 instruction means for establishing a write memory call within said operating system debugger;

Docket No. AUS920010385US1

instruction means for invoking said write memory function call by said operating system debugger; and

instruction means for writing data to a physical memory location utilizing said partition management
5 firmware in response said operating system debugger invoking said write memory function call.

14. The product according to claim 9, further comprising:

10 instruction means for determining whether debugging is enabled within said partition management firmware;

instruction means for permitting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a
15 determination that debugging is enabled within said partition management firmware; and

instruction means for prohibiting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a
20 determination that debugging is disabled within said partition management firmware.

15. The product according to claim 14, further comprising:

25 instruction means for including a service processor within said data processing system;

instruction means for enabling debugging within said partition management firmware utilizing said service processor; and

30 instruction means for disabling debugging within said partition management firmware utilizing said service processor.

Docket No. AUS920010385US1

16. The product according to claim 9, wherein said data
processing system includes hardware, wherein said
operating system debugger exists within a partition, and
5 further wherein said partition management firmware exists
between said partition said hardware.

17. A logically partitioned data processing system
including an operating system debugger and a partition
10 management firmware comprising:

extensions included within said operating system
debugger; and

said operating system debugger for utilizing said
extensions to debug said partition management firmware.

15 18. The system according to claim 17, further comprising
function calls established within said operating system
debugger that when invoked by said operating system
debugger cause said partition management firmware to
20 execute partition management firmware operations.

19. The system according to claim 18, further
comprising:

said operating system debugger including an event
25 handler routine;

said operating system debugger for invoking said
event handler routine; and

said partition management firmware for reporting to
said operating system debugger partition management
30 firmware events in response to said operating system
debugger invoking said event handler routine.

Docket No. AUS920010385US1

20. The system according to claim 18, further comprising:

said operating system debugger including a read memory call;

5 said operating system debugger for invoking said read memory function; and

10 said partition management firmware for reading data from a physical memory location in response said operating system debugger invoking said read memory function call.

21. The system according to claim 18, further comprising:

15 said operating system debugger including a write memory call;

 said operating system debugger for invoking said write memory function; and

20 said partition management firmware for writing data to a physical memory location in response said operating system debugger invoking said write memory function call.

22. The system according to claim 17, further comprising:

25 means for determining whether debugging is enabled within said partition management firmware;

 said operating system debugger being permitted to utilize said extensions to debug said partition management firmware in response to a determination that debugging is enabled within said partition management
30 firmware; and

 said operating system debugger being prohibited from utilizing said extensions to debug said partition

Docket No. AUS920010385US1

management firmware in response to a determination that debugging is disabled within said partition management firmware.

- 5 23. The system according to claim 22, further comprising:

 a service processor included within said data processing system; and

- 10 said service processor for enabling and disabling debugging within said partition management firmware.

- 15 24. The system according to claim 17, wherein said data processing system includes hardware, wherein said operating system debugger exists within a partition, and further wherein said partition management firmware exists between said partition said hardware.